

## Park Electrochemical Nelcote® P-650R Polyester Prepreg, 7781 E-Glass Reinforced

Category : Polymer , Thermoset , Polyester, TS

### Material Notes:

Nelcote® P-650R is a non-styrenated/low VOC polyester resin system that has been designed for optical clarity. P-650 exhibits good mechanical properties up to 250°F. Key Features and Benefits: Non-styrenated / low VOC resin system Meets requirements of MIL-R-7575C, grades A and B, class 2 Good optical clarity for aircraft lighting, etc. Applications/Qualifications: Aircraft lighting Wing-light lenses Aircraft floor lighting Information provided by Park Electrochemical Corp.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Park-Electrochemical-Nelcote-P-650R-Polyester-Prepreg-7781-E-Glass-Reinforced.php](http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelcote-P-650R-Polyester-Prepreg-7781-E-Glass-Reinforced.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.88 g/cc	1.88 g/cc	
Volatiles	<= 1.0 % @Temperature 104 °C	<= 1.0 % @Temperature 220 °F	8 min
Thickness	254 microns	10.0 mil	cured laminate, per ply

Mechanical Properties	Metric	English	Comments
Hardness, Barcol	76	76	
Tensile Strength, Yield	421 MPa @Temperature 23.9 °C	61000 psi @Temperature 75.0 °F	0° Direction, Wet (2 hour water boil); ASTM D638 Type 1
	469 MPa @Temperature 23.9 °C	68000 psi @Temperature 75.0 °F	0° Direction, Dry; ASTM D638 Type 1
Tensile Modulus	24.8 GPa @Temperature 23.9 °C	3600 ksi @Temperature 75.0 °F	0° Direction, Wet (2 hour water boil); ASTM D638 Type 1
	25.5 GPa @Temperature 23.9 °C	3700 ksi @Temperature 75.0 °F	0° Direction, Dry; ASTM D638 Type 1
Flexural Strength	496 MPa @Temperature 71.1 °C	72000 psi @Temperature 160 °F	Dry; ASTM D790
	586 MPa @Temperature 23.9 °C	85000 psi @Temperature 75.0 °F	Wet (2 hour water boil); ASTM D790
	669 MPa @Temperature 23.9 °C	97000 psi @Temperature 75.0 °F	Dry; ASTM D790

Mechanical Properties	Metric	English	Comments
Flexural Modulus	21.4 GPa	3100 ksi	Dry; ASTM D790
	@Temperature 71.1 °C	@Temperature 160 °F	
	22.8 GPa	3300 ksi	Dry; ASTM D790
	@Temperature 23.9 °C	@Temperature 75.0 °F	
	22.8 GPa	3300 ksi	Wet (2 hour water boil); ASTM D790
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Compressive Strength	393 MPa	57000 psi	Wet (2 hour water boil); ASTM D695
	@Temperature 23.9 °C	@Temperature 75.0 °F	
	421 MPa	61000 psi	Dry; ASTM D695
	@Temperature 23.9 °C	@Temperature 75.0 °F	
Compressive Modulus	25.5 GPa	3700 ksi	Wet (2 hour water boil); ASTM D695
	@Temperature 23.9 °C	@Temperature 75.0 °F	
	27.6 GPa	4000 ksi	Dry; ASTM D695
	@Temperature 23.9 °C	@Temperature 75.0 °F	

Processing Properties	Metric	English	Comments
Gel Time	0.500 min	0.500 min	
Shelf Life	3.00 Month	3.00 Month	
	@Temperature 4.44 °C	@Temperature 40.0 °F	
	6.00 Month	6.00 Month	
	@Temperature -17.8 °C	@Temperature 0.000 °F	

Descriptive Properties	Value	Comments
Fabric Area Weight (g/m <sup>2</sup> )	300	
Prepreg Resin Content (%)	38-44	
Resin Flow (%)	10-11	275°F, 15psi

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China